FOR NATIONAL PHASE SUBMISSION

2

CLAIM AMENDMENTS

WHAT IS CLAIMED IS:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

1.   (Currently Amended) ~~Method~~ A method for adapting a measured value ~~(MW1)~~ of an air mass sensor ~~(14), in which~~comprising the steps of:

-       determining a correction value ~~(KW1, KW2) is determined,~~ if predefined operating conditions ~~(BB1, BB2) obtain~~ exist, depending on the measured value ~~(MW1)~~ and a comparison value ~~(VW)~~ which is determined depending on at least one further measured value ~~(MW2)~~ of a further sensor,

-       checking and adapting an adaptation value ~~(AD1, AD2) is checked and adapted~~ depending on the correction value ~~(KW1, KW2)~~, on the duration ~~(D_AD1, D_AD2)~~ since the last adaptation of the adaptation value, ~~(AD1, AD2)~~ and on the change in the adaptation value ~~(AD1, AD2)~~ since the last adaptation of the adaptation value, ~~(AD1, AD2)~~ and

-       correcting measured values ~~(MW1)~~ subsequently recorded ~~are corrected~~ with the adaptation value ~~(AD1, AD2)~~.

2.   (Currently Amended) ~~Method~~ A method ~~in accordance with one of the previous claims~~according to claim 1, ~~in which,~~wherein, as the duration ~~(D_AD1, D_AD2)~~ since the last adaptation of the adaptation value ~~(AD1, AD2)~~ increases, the adaptation value ~~(AD1, AD2)~~ is adapted more heavily depending on the correction value ~~(KW1, KW2)~~.

3.   (Currently Amended) <u>A method according to claim 1, wherein</u><s>Method in accordance with one of the previous claims, in which</s> for a change in the adaptation value <s>(AD1, AD2)</s>, which is characteristic for an unauthorized modification <s>(UM)</s> to the air mass sensor <s>(14)</s>, the adaptation value <s>(AD1, AD2)</s> is assigned an initialization value <s>(AD1_INI)</s>.

4.   (Currently Amended) <u>A method according to claim 3, wherein</u><s>Method in accordance with claim 3, in which</s> a negative change of the adaptation value <s>(AD1, AD2)</s>, of which the amount is greater than a predefinable first threshold value <s>(SW1)</s>, and a duration <s>(D_AD2, D_AD1)</s> since the last determination of the correction value <s>(KW1, KW2)</s>, which is less than a predefined second threshold value <s>(SW2)</s>, are characteristic of the unauthorized modification <s>(UM)</s> to the air mass sensor <s>(14)</s>.

5.   (Currently Amended) <u>A method according to claim 1, wherein</u><s>Method in accordance with one of the previous claims, in which</s> a positive change to the adaptation value <s>(AD1, AD2)</s>, of which the amount is greater than a predefinable first threshold value <s>(SW3)</s>, and a duration <s>(D_AD1, D_AD2)</s> since the last determination of the correction value <s>(KW1, KW2)</s>, which is less than a predefined second threshold value <s>(SW4)</s>, are characteristic of an extraordinary contamination of the air mass sensor <s>(14)</s>, and in which an error reaction occurs on detection of an extraordinary contamination.

6.   (Currently Amended) A method according to claim 5, wherein ~~Method in accordance with claim 5,in which~~ the error reaction is an indication of an error, which occurs so that the driver of a motor vehicle in which the air mass sensor ~~(14)~~ can be located recognizes that an error has occurred.

7.   (Currently Amended) A method according to claim 1, wherein~~Method in accordance with one of the previous claims, in which~~ at least a first correction value ~~(KW1)~~ and a second correction value ~~(KW2)~~ are determined, ~~with~~ wherein the first correction value ~~(KW1) being~~ is determined if predefined first operating conditions ~~(BB1) obtain~~exits, and the second correction value ~~(KW2) being~~is determined if predefined second operating conditions ~~(BB2) obtain~~exist, and ~~in which~~wherein, depending on the first correction value ~~(KW1)~~ a first adaptation value ~~(AD1)~~ is checked and adapted, and depending on the second correction value ~~(KW2)~~ a second adaptation value ~~(AD2)~~ is checked and adapted and measured values ~~(MW1)~~ of the air mass sensor ~~(14)~~ subsequently recorded are corrected with an adaptation value ~~(AD)~~ interpolated, depending on the current operating conditions ~~(BB)~~, between the at least first and second adaptation value ~~(AD1, AD2)~~.

8.   **(NEW)** A method for adapting a measured value of an air mass sensor comprising the steps of:

- determining a comparison value depending on at least one further measured value of a further sensor,

- determining a correction value depending on the measured value and the comparison value,

- checking and adapting an adaptation value depending on the correction value, on the duration since the last adaptation of the adaptation value, and on the change in the adaptation value since the last adaptation of the adaptation value, and

- correcting measured values subsequently recorded with the adaptation value.

9.   **(NEW)** A method according to claim 8, wherein, as the duration since the last adaptation of the adaptation value increases, the adaptation value is adapted more heavily depending on the correction value.

10.   **(NEW)** A method according to claim 8, wherein for a change in the adaptation value, which is characteristic for an unauthorized modification to the air mass sensor, the adaptation value is assigned an initialization value.

11.   **(NEW)** A method according to claim 10, wherein a negative change of the adaptation value, of which the amount is greater than a predefinable first threshold value, and a duration since the last determination of the correction value, which is less than a predefined second threshold value, are characteristic of the unauthorized modification to the air mass sensor.

12.   **(NEW)** A method according to claim 8, wherein a positive change to the adaptation value, of which the amount is greater than a predefinable first threshold value, and a duration since the last determination of the correction value, which is less than a predefined second threshold value, are characteristic of an extraordinary contamination of the air mass sensor, and in which an error reaction occurs on detection of an extraordinary contamination.

13.   **(NEW)** A method according to claim 12, wherein the error reaction is an indication of an error, which occurs so that the driver of a motor vehicle in which the air mass sensor can be located recognizes that an error has occurred.

14.   **(NEW)** A method according to claim 8, wherein at least a first correction value and a second correction value are determined, wherein the first correction value is determined if predefined first operating conditions exits, and the second correction value is determined if predefined second operating conditions exist, and wherein, depending on the first correction value a first adaptation value is checked and adapted, and depending on the second correction value a second adaptation value is checked and adapted and measured values of the air mass sensor subsequently recorded are corrected with an adaptation value interpolated, depending on the current operating conditions, between the at least first and second adaptation value.